FEDERALLY ENDANGERED

Eskimo Curlew

(Numenius borealis)

Mark McCollough

Description

Everyone has heard of the passenger pigeon, but far less familar is the Eskimo curlew that has shared a similar fate. The Eskimo curlew is one of North America's rarest birds and may be extinct. It is a large shorebird, approximately 11 inches long, with a thin, slightly decurved bill. It is predominantly brown above, fading to buff on the breast and abdomen. The chin and throat are not streaked, but the sides of the head and neck, chest and upper breast have narrow dark streaks that change to broad V- or Y-shaped markings on the flanks. The back and shoulders are almost black with buff-colored markings. The tail is grayish-brown with dark bars and a narrow buffy stripe at the tip. There are dark stripes on the head with an indistinct median crown stripe. The legs are bluish-gray.

The Eskimo curlew is easily confused with the closely related and more common whimbrel that is regularly observed in Maine in late summer. The Eskimo curlew is 25 percent shorter in body length and appears more brown than the whimbrel, which is more gray. In addition, the whimbrel has a distinct light median crown stripe, while the curlew's stripe is indistinct or even absent. The whimbrel has grayish wing linings, while the curlew's are cinnamon-colored. The whimbrel has barring on the underside of the primaries, but the curlew's primaries are clear underneath (although the underwing coverts are barred).

Range and Habitat

The Eskimo curlew is a species of the far north, breeding in northern Alaska and the Northwest Territories of Canada. It spends the winter many thousands of miles away in the extreme southern parts of South America. Its northward and southward migrations follow two different routes. In the spring, it migrates north along the western edge of South America, across Central America, and through the prairie states and provinces to its breeding grounds. This predominantly land-based migration takes the bird through important feeding areas in the Midwest. In the fall, the birds fly eastward across Canada to Labrador and occasionally through the northeastern U.S., and then far out over the Atlantic Ocean on a non-stop flight to South America. In recent years, the range of this species has been questionable, because so few birds have been observed on breeding, wintering, or migratory staging areas.

The Eskimo curlew breeds on tundra in arctic and subarctic regions. Breeding grounds are treeless and contain dwarf shrubs, grasses, and sedges. Often, these areas support plants of the heath family, particularly crowberry *(Empetrum nigrum)*, the berries of which are an important food source for curlews arriving in the spring. Wintering grounds in South America include large, open, treeless areas dominated by grasses and interspersed with wetlands. Northward migration in the spring takes the curlew through tallgrass and mixed grass prairies, which provide a variety of invertebrate foods. The curlews seem to have a preference for burned-over areas, rather than cultivated areas. During southward migration, they favor old fields, pastures, blueberry barrens, salt grass meadows, sand dunes, and intertidal flats.

Life History and Ecology

In the past, large northward-migrating flocks of Eskimo curlews arrived from March to mid-May on the grasslands of North America to feed on abundant insects. Curlews were commonly found in association with the American golden plover *(Pluvialis dominica)*. Grasshop-

©2003 Maine Department of Inland Fisheries & Wildlife •

pers, particularly the Rocky Mountain grasshopper *(Melanoplus spretus)*, which is now extinct, was a preferred food. Sometimes Eskimo curlews followed farmers plowing fields and ate the insect larvae and worms brought to the surface.

They arrive on arctic nesting grounds in May and remain until early August. Curlews eat berries from the previous growing season while on the breeding grounds, but also consume insects. Little is known about the nesting behavior of the Eskimo curlew. Because of the short arctic breeding season, curlews only produce one brood during mid to late June. Nests are a depression in the earth lined with decayed leaves. Usually four eggs are laid. It is unknown if both sexes or only the female incubate the eggs, but in related species, both parents incubate. Peak hatching occurs during the end of June through mid-July. After hatching, the young are cared for by both parents.

The adult birds leave the breeding grounds before the fledglings to begin the eastward and southward migration. These migrants historically reached the coast of Labrador in eastern Canada by mid-August where they fed on crowberries on the tundra until departing in late September. Fall migrants could be seen along the New England coast from late August to mid-October where they rested in large fields and consumed berries; they also ate insects, spiders, worms, fiddler crabs, and grass seeds.

Threats

In the 19th century, flocks of Eskimo curlew numbering in the thousands were seen along migration routes. Extensive agricultural development in the Great Plains eliminated most of the tallgrass and mixed-grass prairie that was essential to the northward migration of the Eskimo curlew. Fire repression hindered the regeneration of these prairie habitats. Without key habitats and food sources, Eskimo curlews could not maintain the energy reserves necessary for their long migrations and successful reproduction.

Hunting also contributed to the species' decline in the 1800s. In a manner similar to the hunting of passenger pigeons, commercial hunters shot curlews by the thousands during spring and fall migrations. When numbers of passenger pigeons became too low, hunting pressure on Eskimo curlews became even greater. New England colonists named them "dough birds" because of the great quantities of fat that they built up in their bodies prior to southerly migration.

Conservation and Management

By the early 1900s, the species was becoming rare, and only about 70 individuals have been observed in the last 50 years. No confirmed reports of Eskimo curlews have been made since the mid-1980s, despite concerted efforts to locate the birds on their breeding and wintering grounds. Several unconfirmed sightings of the Eskimo curlew have occurred during the last 20 years. Some of these birds were likely whimbrels. The most frequent sightings have been in Texas, and the most recent unconfirmed sighting occurred in 1996 in southwestern Manitoba.

It is unknown whether the Eskimo curlew still exists. It is possible that populations, when reduced below a certain level, were unable to recover. The breeding grounds of this bird have remained relatively unchanged and pristine. However, migratory staging areas have changed dramatically and no longer provide sufficient food and habitat. In addition, changes to habitats in South America, while not contributing directly to the decline of the species, will likely hinder any possible recovery to a viable population level.

To preserve any chance of preventing the species' extinction, conservation measures are being implemented jointly by the governments of the United States, Canada, and Argentina. Currently, there is no recovery plan for the Eskimo curlew. However, the bird is protected by legislation in Canada, Mexico, and the United States. In the U.S. the Eskimo curlew is protected by the federal Endangered Species Act and the Migratory Bird Treaty Act. Although its breeding habitat is secure, the grasslands on which the curlew depends during winter and migration have decreased in quantity and quality. Preserving and re-creating grasslands will be essential for any conservation efforts to succeed for this species. Specifically, the Eskimo curlew needs natural tallgrass and mixed-grass prairies, with a regime of controlled burning for their regeneration, rather than cultivated farmland. In addition, some researchers have proposed a captive breeding and release program, should any adult curlews be located. However, such a program has the inherent risk of removing the last remaining birds from the wild with the possibility that they will not survive in captivity.

Recommendations:

✔ Report any sightings of Eskimo curlews immediately to MDIFW and U.S. Fish and Wildlife Service biologists.